

REMARKS/ARGUMENTS

Subject to the Examiner's entry of the amendments to the claims made herein, claims 1-33 are pending in the application. In the above Office Action the Examiner has rejected claims 1-31 in the manner discussed below. By this Amendment claims 1, 23 and 26 have been amended, and new claims 32-33 have been added, in order to further define the present invention.

In paragraph 1 of the above Office Action, the Examiner stated that the oath or declaration is defective because it requires a statement signed by the Applicant/Applicants giving his/her complete post office address (37 CFR 1.33(a)). In response, Applicant filed a Communication dated May 7, 2003, enclosing a copy of a Declaration previously filed in the above patent application (a copy of which is enclosed for your convenience). The Declaration was signed by both inventors and included the complete post office address for each.

In paragraph 3 of the Office Action, the Examiner rejected claims 1-20 under 35 U.S.C. §103(a) as being unpatentable over Weissman et al in view of Haartsen and Soliman. The Examiner characterizes the Weissman reference as follows:

Regarding claims 1, 5, 13, 23 and 26, Weissman discloses (Abstract, Fig. 4, col. 7, line 61-67, col. 8, line 57 thru col. 9, line 5, col. 10, line 6-16) in building radio frequency coverage that includes [a] wireless transceivers, a first and second wireless system, first/second wireless protocols (PCS/Cellular), diversity master unit, up/down conversions, (col. 8, line 32 thru col. 10, line 67) IF up/down conversions and a controller for setting frequencies. Weismann is silent on multiple up/down conversions and a controller coupled to a wireless transceiver.

Applicant observes that Weissman describes, with reference to FIG. 4, a repeater system designed for in-building use (see col. 13, lines 26-30). In the system of Weissman's FIG. 4, the operation of PCS and Cellular system units of a repeater system 150 at different frequencies is described:

Master PCS unit 154 and master PCS antenna 176 operate generally as master CELL unit 12 and master CELL antenna 14, as described above with reference to FIG. 2, except that master PCS unit 154 and master PCS antenna 176 operate at frequencies different from those of master CELL unit 12 and master CELL antenna 14.

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Because the Weissman's repeater system 150 of FIG. 4 operates within two distinct frequency bands, the repeater system 150 need not implement the coordinated communication

contemplated by the present invention. That is, Weissman's system need not and in fact does not operate by performing transmits and receives in accordance with first and second protocols in a coordinated manner. Such coordinated communication is not required to effect PCS and Cellular communication with in the context of Weissman's system.

The coordinated nature of the multi-protocol communication conducted in accordance with the invention is described in the present specification with reference to FIG. 2 as follows:

Figure 2 illustrates a period of operation in accordance with this embodiment. As shown, in time period T1, for duration t1, C/SP section 106 operates joint signal transmit/receive section 103 and signal up/down conversion pairs 105a-105b to perform transit of signals to devices 104a of wireless network 108a (hereinafter, simply network) in accordance with the first wireless communication protocol (hereinafter, simply protocol), at the exclusion of devices 104b of network 108b. During this period, C/SP section 106 also temporarily suspends processing of signals output from the signal down conversion sections of signal up/down conversion pairs 105a-105b. In time period T3, for duration t3, the operation is performed for the second protocol. That is, C/SP section 106 operates joint signal transmit/receive section 103 and signal up/down conversion pairs 105a-105b to perform transmit of signals to devices 104b of network 108b in accordance with the second protocol, at the exclusion of devices 104a of network 108a; and in like manner, temporarily suspends processing signals output from the signal down conversion sections of signal up/down conversion pairs 105a-105b. In time period T2 and T4, for duration t2 and t4 respectively, C/SP section 106 processes signals output by the down conversion section of both signal up/down conversion pairs 105a-105b to receive signals from devices 104a and 104b of network 108a and 108b in accordance with the respective protocols. During these time periods, C/SP section 106 temporarily suspends transmissions of signals to devices 104a as well as devices 104b of networks 108a and 108b.

[6:20-715]

As indicated by the above excerpt from the specification, the present invention effects coordinated transmission and reception of multiple protocols by, for example, selectively transmitting signal energy in accordance with particular protocols only during certain time periods and selectively processing received signal energy only during other time periods. Neither Weissman, nor any of the other references cited by the Examiner, describe or suggest this type of coordinated transmission and reception. In fact, both Weissman and Haartsen effectively teach away from such an approach by respectively describing multi-band and multi-carrier systems in which transmitted and received signal energy is filtered or otherwise segregated into non-interfering bands.

Notwithstanding these differences between the cited references and the inventions of claims 1-16 and 23-28, independent claims 1, 23 and 26 have been amended in order to more specifically describe a particular aspect of the inventive coordinated communication approach. Specifically, these claims now recite that *selective* transmit and receive operations are conducted in accordance with the two protocols of interest. Performance of such selective transmit and receive operations is described in the above excerpt from the specification with reference to FIG. 2 (e.g., note the selective transmission and reception operations conducted in the up/down conversion pairs 105a, 105b as a function of time). Applicant respectfully submits that none of the cited references describe or suggest the selective performance of coordinated transmit and receive operations of this nature.

In paragraph 4 of the Office Action, the Examiner rejected claims 7 and 13 under 35 U.S.C. §103(a) as being unpatentable over Weissman et al in view of Haartsen and Soliman, and further in view of Blasing et al. Applicant respectfully submits that this rejection has also been traversed for the reasons set forth above.

New claim 32 is patterned after claim 23, but further recites that that the duration of transmit/receive operations is predicated upon workloads associated with the applicable protocols.

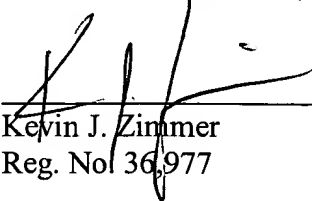
Applicant respectfully requests entry of the amendments described herein prior to further examination of the above-identified application. The undersigned would of course be available to discuss the present application with the Examiner if, in the opinion of the Examiner, such a discussion could lead to resolution of any outstanding issues.

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